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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,968	03/19/2004	Kyoung-sig Roh	Q80077	6471

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EXAMINER	
TRAN, MY CHAU T	

ART UNIT	PAPER NUMBER
2629	

MAIL DATE	DELIVERY MODE
11/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/803,968	ROH ET AL.	
	Examiner	Art Unit	
	MY-CHAU T. TRAN	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/01/2007 has been entered.

Application and Claims Status

2. Applicant's amendment and response filed 10/01/2007 are acknowledged and entered.

3. Claims 1-8 were pending. Applicants have amended claims 1, 3, 4, and 7. No claims were added and/or cancelled. Therefore, claims 1-8 are currently pending and are under consideration in this Office Action.

Status of Claim(s) Objection(s) and /or Rejection(s)

4. All previous rejections have been withdrawn in view of applicant's amendments of claims 1 and 7, and/or arguments. Additionally, the allowability of claims 4-6 and 8 is withdrawn in view of Wilson et al. (US 6,982,697 B2; *Filing Date of 05/31/2002*).

Claim Objections

5. Claim 8 is objected to because of the following informalities:

Claim 8 recites a method for a handheld input system wherein the method comprises the steps of a) detecting a tilt angle and three-dimensional axial direction an acceleration based on a movement of a handheld body at a magnetic field detection unit and an acceleration detection unit, respectively, wherein the magnetic field detection unit and the acceleration detection unit are mounted in the handheld body; b) calculating absolute coordinates of the handheld body from the tilt angle detected at the magnetic field detection unit and the acceleration detected at the acceleration detection unit; c) detecting a tilt angle and three-dimensional axial direction an acceleration based on a movement of a handheld body at a magnetic field detection unit and an acceleration detection unit, respectively, wherein the magnetic field detection unit and the acceleration detection unit are mounted in the handheld body; and d) calculating absolute coordinates of the handheld body from the tilt angle detected at the magnetic field detection unit and the acceleration detected at the acceleration detection unit. Here, steps c) and d) are identical to steps a) and b), and a result, the method step c) and d) are redundant. Moreover, the original claim 8 only recited steps (a) and (b).

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Wilson et al. (US 6,982,697 B2; *Filing Date of 05/31/2002*).

For ***claims 1-3 and 7***, Wilson et al. disclose a wireless input system (see e.g. Abstract; col. 1, line 14-19; col. 2, line 56 thru col. 3, line 20). In general, the input system includes a case, the radio frequency (RF) transceiver, power supply, microcontroller, and orientation sensors that include an accelerometer and a magnetometer (see e.g. col. 3, lines 10-20; col. 4, lines 6-43; col. 9, lines 5-47; col. 18, lines 5-50; fig. 3). The accelerometer (refers to instant claimed accelerations detection unit) and magnetometer (refers to instant claimed magnetic field detection unit) outputs x, y, and z axis signals that is use to define the orientation of the input device in terms of its pitch, roll, and yaw angle about the x, y, and z axes of the coordinate system (refers to instant claimed detects a tilt angle/detects respective axial direction accelerations of the movement)(see e.g. col. 4, lines 6-43; col. 9, lines 5-47; col. 18, lines 5-50). The case houses the radio frequency (RF) transceiver, power supply, microcontroller, and orientation sensors (refers to instant claimed mounted in a pen-shaped body/handheld body), and can be in the shape of a cylindrical wand (refers to instant claimed handheld body) or a writing pen (refers to instant claimed pen-shaped body)(see e.g. col. 3, lines 10-20; col. 8, line 59 thru col. 9, line 4). The microcontroller (refers to instant claimed control unit) transmits via the RF transceiver (refers to instant claimed communication module) to the host computer (refers to instant claimed external computing device) orientation messages that contained the calculated values of the input system orientation about the x, y, and z axes of the coordinate system base on the output x, y, and z axis signals of the accelerometer and magnetometer (refers to instant claimed calculates absolute coordinates and instant claim 2)(see e.g. col. 4, lines 6-43; col. 8,

lines 16-37; col. 18, lines 5-50; figs. 11A and 11B). Additionally, Wilson et al. disclose that the type of accelerometer include a 3-axis accelerometer (refers to instant claim 2)(see e.g. col. 20, line 59 thru col. 21, line 3).

For ***claims 4-6 and 8***, Wilson et al. disclose the method of determining the orientation of the input system (see e.g. col. 2, line 56 thru col. 3, line 9; col. 3, lines 21-31; col. 3, line 57 thru col. 4, line 43). The method comprises the steps of a) detecting the pitch, roll, and yaw angle about the x, y, and z axes of the coordinate system using the accelerometer and magnetometer (refers to instant claimed detecting step and claim 5); b) calculating the input system orientation about the x, y, and z axes of the coordinate system base on the measurements of the accelerometer and magnetometer (refers to instant claimed calculating step); c) transmitting the calculated values of the input system orientation about the x, y, and z axes of the coordinate system to the host computer (refers to instant claim 6)(see e.g. col. 3, line 57 thru col. 4, line 43; col. 8, lines 16-37; col. 18, lines 5-50; figs. 11A and 11B). The case of the input system houses the radio frequency (RF) transceiver, power supply, microcontroller, and orientation sensors that include an accelerometer and a magnetometer (refers to instant claimed mounted in a pen-shaped body/handheld body), and can be in the shape of a cylindrical wand (refers to instant claimed handheld body) or a writing pen (refers to instant claimed pen-shaped body)(see e.g. col. 3, lines 10-20; col. 4, lines 6-43; col. 8, line 59 thru col. 9, line 4; col. 9, lines 5-47; col. 18, lines 5-50; fig. 3). Additionally, Wilson et al. disclose that the type of accelerometer include a 3-axis accelerometer (refers to instant claim 5)(see e.g. col. 20, line 59 thru col. 21, line 3).

Therefore, the device and method of Wilson et al. do anticipate the instant claimed invention.

Conclusion

8. No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MY-CHAU T. TRAN whose telephone number is 571-272-0810. The examiner can normally be reached on Monday: 8:00-2:30; Tuesday-Thursday: 7:30-5:00; Friday: 8:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/My-Chau T. Tran/
Primary Examiner
Art Unit 2629
November 20, 2007

MY-CHAU T. TRAN
PATENT EXAMINER
11/20/07
Primary